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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/941,148	08/27/2001	Thomas Huber	INTE.17USU1	4598
27479	7590	10/24/2003	EXAMINER	
THE LAW OFFICES OF WILLIAM W. COCHRAN, LLC 3555 STANFORD ROAD SUITE 230 FORT COLLINS, CO 80525			SALCE, JASON P	
		ART UNIT		PAPER NUMBER
		2611		
DATE MAILED: 10/24/2003				

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/941,148	HUBER ET AL.
	Examiner	Art Unit
	Jason P Salce	2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on \_\_\_\_.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 10-15,27-34,44-49,62 and 64-87 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_ is/are allowed.  
 6) Claim(s) 10-15,27-34,44-49,62 and 64-87 is/are rejected.  
 7) Claim(s) \_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 11) The proposed drawing correction filed on \_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.  
 12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.  
 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a) The translation of the foreign language provisional application has been received.  
 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: ____.                                    |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 7/31/03 have been fully considered but they are not persuasive.

Referring to claim 10, examiner agrees with applicant that Nickum fails to disclose the newly added limitation of "enhanced interactive" content, therefore, the examiner provides the Perlman reference cited in the previous Office Action for a teaching of providing enhanced content based on the identify of the user (rating code set by parent). Note that since the additional limitation of the "enhanced interactive" content has been added to claim 10, the scope of the claim has been altered; therefore this Office Action is final.

Referring to claims 12 and 13, examiner disagrees with applicant and notes that even though an adult may use the children's remote control, the remote control would still only recognize programming suitable for a child (see again Column 4, Lines 62-65).

Referring to claim 14, examiner agrees with applicant that Nickum fails to teach deriving profile data based on a usage pattern. The examiner provides the Perlman reference cited in the previous Office Action for a teaching of keeping a list of channels previously viewed that are permitted for viewing (usage pattern).

Referring to claim 44, see arguments made in regards to claim 10.

Referring to claim 11, the applicant argues that Nickum nor Perlman disclose "controlling the interactive output of a set-top box" or "comparing tags placed in the video stream that indicate the content of the video stream" or "comparing tags to

preference or profile data within the current user database". As stated in the previous Office Action, Perlman teaches the broad limitations. Perlman discloses tags (EPG data) which contains rating codes, which are compared to preference and profile data (user defined rating code at set-top box), and after comparison determine if a program can be viewed (control the interactive output). Also note that the user defined ratings code is the preference and profile data. The examiner states that the user defined ratings code represents the preference (what shows he/she wishes to watch) and the profile (defines the user's programming).

Referring to claim 15, applicant argues that the electronic program guide is not a tag. Examiner disagrees and notes that the term "tag" is broad, and could read on any type of information embedded data inserted anywhere within a video signal transmitted to a viewer.

Referring to claims 32-34 and 68-70, the applicant argues that neither Nickum nor Perlman discloses the limitations in these claims. Examiner agrees and notes that Official Notice had been taken in regards to these claims. New references are provided with a teaching of creating tags according to video recognition techniques utilizing keywords, key images and key sounds.

Newly presented claims 71-87 present the additional limitations of the video content being in segments. The examiner notes that the term "segment" is broad, and that a segment can be either a portion of a program or the program in its entirety. For example, each program can be a segment of a 24-hour programming block for CBS.

Therefore, claims 10-15, 28-34, 44-49, 62-70 and 71-87 are rejected by Nickum in view of Perlman.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2. Claim 10 recites the limitations "recognition data", "interactive output" and "video content" in Lines 8, 12 and 13, respectively. There is insufficient antecedent basis for this limitation in the claim.

Referring to claim 11, the limitation "video stream" lacks antecedent basis.

Claim 27 recites the limitations "recognition data" and "video content" in Lines 8 and 13-15, respectively. There is insufficient antecedent basis for this limitation in the claim. Claim 27 also recites the limitation "video stream" at Line 14, which also lacks antecedent basis in the claim.

Referring to claims 32-34, the limitation "video content" at Line 2 also lacks antecedent basis.

Referring to claims 45 and 49, the limitation "video stream" at Lines 4 and 2, respectively, lacks antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 10-15, 27-31, 44-49, 62, 64-67, 71-75 and 79-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nickum in view of Perlman (U.S. Patent No. 6,125,259).

Referring to claim 10, Nickum discloses a method of controlling displayed video and data content utilizing a remote control device (Column 1, Lines 55-56) that interacts with a set-top box (Column 5, Lines 29-33).

Nickum also discloses recognizing a current user with an interface in said personal remote control unit (Column 5, Lines 16-21).

Nickum also discloses establishing an identification of a current user based upon the recognition of data supplied to the remote (Column 5, Lines 16-21).

Nickum also discloses communicating the identification of the current user to the set-top box (Column 5, Lines 11-13), and note that the disclosure of Nickum states, "the process represented by FIG. 4 can be executed by circuitry incorporated in the remote control devices, the television receiver, or an attached device such as a cable control box" (Column 5, Lines 28-33).

Nickum also discloses assigning preference and profile data (program control data and profile data) corresponding to the current user to a current user database (EEPROM) within the set-top box (see explanation above regarding the set-top box and Column 5, Lines 46-49).

Nickum also discloses controlling output of the set-top box by controlling video content based on the preference and profile data within said current user database (see explanation above regarding the set-top box and Column 6, Lines 9-19 and Lines 58-

67).

Nickum provides interactive content (by a user changing a channel, this is interactive), but fails to teach providing “enhanced interactive content” to a user. Perlman discloses, “enhanced interactive content” by providing EPG data (tags) that include a ratings code in the video stream that is transmitted to the user (see Column 5, Lines 3-8 and Lines 14-31). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the regular television broadcast, as taught by Nickum, using the enhanced EPG data (tags), as taught by Perlman, for the purpose of inhibit the display of channels broadcasting television programs which contain unacceptable material (see Column 3, Lines 60-63 of Perlman).

Claim 11 corresponds to claim 10, where Nickum teaches all of the limitations in claim 10, but fails to teach comparing tags that are placed in the video stream that indicate content of the video stream to preference and profile data. Perlman teaches EPG data, which includes rating data (Column 5, Lines 14-27 and Table I), and that is transmitted from a headend to a receiver (Column 12, Lines 35-37) and this data is compared to preference and profile data (predefined ratings code in parental control unit at Column 7, Lines 63-67).

Claims 12 and 13 correspond to claim 10, where Nickum discloses that the recognition of the current user is based on a physical or intellectual attribute. Note that Nickum can provide a special remote for children (Column 4, Lines 62-65). It is therefore inherent, that when the children’s remote is used, the set-top box is aware a child is accessing the system. The examiner notes that a child has specific physical

and intellectual attributes. Also see response to arguments section of this Office Action to support these arguments.

Claim 14 corresponds to claim 10, where Perlman discloses that profile data can be derived from usage patterns of the remote control device (see Column 4, Lines 10-19).

Claim 15 corresponds to claim 10 and directly relates to claim 11, where Perlman notes that EPG data is sent from the headend, which is before receiving the data at the input of the set-top box, therefore the data is “pre-tagged” (see Column 5, Lines 8-10).

Referring to claim 27, see rejection of claims 10 and 11.

Referring to claims 28-31, see rejection of claims 12-15.

Claim 44 directly relates to claim 10, where Nickum discloses an ID input device within the remote to determine the identity of the current user (Column 5, Lines 42-44), and a communications link between the personalized remote control and the set-top box for transmission of the identification of the current user to the set-top box (Column 3, Lines 49-58 and Column 8, Lines 34-36).

Nickum also discloses that the set-top box assigns preference and profile data corresponding to the current user to a current user database within the set-top box (Column 5, Lines 46-49), and controls the interactive output by controlling the video content based on the preference and profile data within the current user database (Column 5, Lines 49-59). Also see rejection of claim 10, for providing “enhanced video content”.

Referring to claim 45, see rejection of claim 11.

Referring to claims 46-48, see rejection of claims 12-14, respectively.

Referring to claim 49, see rejection of claim 15.

Referring to claim 62, see rejection of claims 44 and 45.

Referring to claims 64-67, see rejection of claims 46-49.

Referring to claim 71, see rejection of claim 62. Also note arguments in regards to a "segment" in the response to arguments section of this Office Action.

Referring to claims 72-75, see rejection of claims 12-15, respectively.

Referring to claim 79, see rejection of claim 71.

Referring to claims 80-84, see rejection of claims 11-15, respectively.

4. Claims 33-34, 69-70, 77-78 and 86-87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nickum in view of Perlman (U.S. Patent No. 6,125,259) in further view of Agrapharam et al. (U.S. Patent No. 6,377,995).

Referring to claims 33-34, Nickum and Perlman disclose all the limitations in claim 27, but fail to teach that the tags are created in real-time by video recognition techniques utilizing key images and sounds. Agrapharam teaches indexing (tagging) a broadcast at a headend according to voice and image recognition (see Column 2, Lines 60-64 and Column 3, Lines 4-6). At the time the invention was made, it would have been obvious to modify the enhanced video content (with tags) distribution system, as taught by Nickum and Perlman, using the voice and image recognition system, as taught by Agrapharam for the purpose of eliminating the use of an operator at a headend for manually tagging video content that is desired for viewing by a subscriber.

Referring to claims 69-70, 77-78 and 86-87, see rejection of claims 33-34.

5. Claims 32, 68, 76 and 85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nickum in view of Perlman (U.S. Patent No. 6,125,259) in further view of Sumita et al. (U.S. Patent No. 6,581,207).

Referring to claim 32, Nickum and Perlman disclose all the limitations in claim 27, but fail to teach that the tags are created in real-time by video recognition techniques utilizing key images and sounds. Sumita discloses searching various programs and EPG data for keywords through various recognition techniques and transmitting the results to an end-user (see Column 4, Lines 39-50 and Column 5, Lines 31-49 and Figure 1). At the time the invention was made, it would have been obvious to modify the enhanced video content (with tags) distribution system, as taught by Nickum and Perlman, using the filtering system, as taught by Sumita, for the purpose of eliminating the use of an operator at a headend for manually tagging video content that is desired for viewing by a subscriber.

Referring to claims 68, 76 and 85, see rejection of claim 32.

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P Salce whose telephone number is (703) 305-1824. The examiner can normally be reached on M-Th 8am-6pm (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on (703) 305-4380. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

October 13, 2003

  
ANDREW FAILE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600